

## **McPherson County**

## Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 26 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the McPherson County economy.<sup>1</sup>

These 26 sectors have a total direct output of approximately \$602.5 million and support 2,412 jobs in McPherson County. Running the model for all 26 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall McPherson County Economy						
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	
Direct Effect	2411.9	10.79%	\$179,937,398	6.21%	\$602,515,362	
<b>Indirect Effect</b>	350.8	1.57%	\$27,378,622	0.94%	\$57,364,078	
<b>Induced Effect</b>	569.7	2.55%	\$33,301,848	1.15%	\$64,424,124	
Total Effect	3332.4	14.91%	\$240,617,869	8.30%	\$724,303,564	

As shown in the above table, agriculture, food, and food processing sectors support 3,332 jobs, or 14.91% of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 26 agriculture, food, and food processing sectors is approximately \$240.6 million, or 8.30% of the GRP.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis">https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis</a>

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **733 employees**. This table also shows the amount of jobs that are created by the agriculture industry in McPherson County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	732.5	\$64,264,772		
Farm machinery and equipment manufacturing	323.4	\$126,794,769		
Grain farming	265.1	\$72,324,440		
All other industrial machinery manufacturing	217.4	\$55,683,429		
Support activities for agriculture and forestry	177.1	\$50,236,644		
Landscape and horticultural services	172.3	\$6,617,712		
Tortilla manufacturing	79.0	\$16,111,775		
Veterinary services	70.1	\$5,952,717		
Frozen specialties manufacturing	67.2	\$24,362,382		
Real estate	64.9	\$6,965,746		

The farm machinery and equipment manufacturing sector directly contributes approximately \$126.8 million to the McPherson County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Farm machinery and equipment manufacturing	323.4	\$126,794,769		
Grain farming	265.1	\$72,324,440		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	732.5	\$64,264,772		
Wet corn milling	30.0	\$56,026,795		
All other industrial machinery manufacturing	217.4	\$55,683,429		
Support activities for agriculture and forestry	177.1	\$50,236,644		
Flour milling	29.3	\$35,006,295		
Oilseed farming	39.0	\$30,290,872		
Frozen specialties manufacturing	67.2	\$24,362,382		
Tortilla manufacturing	79.0	\$16,111,775		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the McPherson County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	39.0	\$30,290,872.57		
Grain farming	265.1	\$72,324,440.00		
Vegetable and melon farming	0.3	\$39,270.16		
Fruit farming	0.1	\$5,805.07		
Greenhouse, nursery, and floriculture production	1.2	\$114,582.91		
All other crop farming	43.0	\$2,493,737.94		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	732.5	\$64,264,770.51		
Dairy cattle and milk production	13.4	\$3,766,959.67		
Poultry and egg production	2.0	\$1,158,983.11		
Animal production, except cattle and poultry and eggs	63.7	\$5,669,550.42		
Commercial logging	2.9	\$86,952.51		
Commercial hunting and trapping	2.8	\$39,044.15		
Support activities for agriculture and forestry	177.1	\$50,236,644.74		
Other animal food manufacturing	12.8	\$15,975,272.18		
Flour milling	29.3	\$35,006,294.25		
Wet corn milling	30.0	\$56,026,794.43		
Frozen specialties manufacturing	67.2	\$24,362,382.89		
Animal, except poultry, slaughtering	22.5	\$15,215,178.49		
Bread and bakery product, except frozen, manufacturing	17.3	\$2,064,010.14		
Frozen cakes and other pastries manufacturing	1.0	\$148,788.05		
Tortilla manufacturing	79.0	\$16,111,774.44		
Breweries	26.7	\$12,064,623.83		
Farm machinery and equipment manufacturing	323.4	\$126,794,769.29		
All other industrial machinery manufacturing	217.4	\$55,683,425.90		
Veterinary services	70.1	\$5,952,717.30		
Landscape and horticultural services	172.3	\$6,617,712.02		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to McPherson County, the retail sector was omitted.